arsenic and strychnine in appropriate doses internally. The result was very good after weeks of treatment. The child could use the affected arm and the electrical reactions became normal in the affected muscles.

Polioencephalomyelitis has been so thoroughly investigated and the various manifestations of the disease complex so carefully analyzed that we should earlier and oftener make the diagnosis, even in isolated and sporadic cases.

In times of epidemic every consideration tending to prophylaxis and arrest should be unhesitatingly enforced.

NECROSIS OF THE HYOID BONE.*

By AD. B. BAER, B. L., B. S., D. D. S., M. D.,
San Francisco.

History of case: Male, 24 years of age. A swelling had developed at the base of the tongue which was described as being about the size of an almond. There was also a swelling in front of the neck externally just to the right of the median line and about three-fourths of an inch below the great wing of the hyoid bone. The external swelling gradually enlarged to about the size of a small walnut, when it broke and discharged pus externally upon the anterior surface of the neck. Diagnosis of a cyst of the hyoglossal duct was made and patient was operated on by a New York surgeon, the diseased area being reached through an incision two inches in length, across the front of the neck, perpendicular to its long axis. The swelling recurred at the end of two months, when it was reoperated by a second surgeon, who made the same diagnosis. The patient then changed his residence to San Francisco for the purpose of building himself up and the condition again recurred at the end of six weeks.

By way of preliminary statement it will be recalled that the thyroid gland develops from the oral cavity in the region of the base of the tongue. The gland buds off from the base of the tongue and finally reaches its position at the front and sides of the neck. It consists of two lateral lobes which lie across and around the trachea like a horseshoe, extending upward to the thyroid cartilage and connected across the median line by a narrow transverse portion, the isthmus. In early embryonic life, the gland has a duct, the thyroglossal duct which passes from the isthmus to its original point of origin at the foramen cecum on the base of the tongue. The duct usually becomes obliterated, becoming a simple cord of epithelium. The upper opening remains as the foramen cecum on the dorsum of the tongue. In some cases the duct remains extant through life and frequently gives rise to cysts, which are known pathologically as cysts of the thyroglossal duct. A great many cases of this condition are on record, have been operated and cured. It was such a condition for which the patient has been operated.

On examination there was a three-inch scar across the front of the neck just above the thyroid cartilage. The entire area beneath the middle portion of the scar was swollen and felt soft and doughy to the touch. The left side was more swollen than the right, but there was a slight discharge of pus from a very small opening just to the right of the median line. Pressure anywhere along the scar increased the flow of pus. It was not possible to feel any of the underlying structure, because of the swelling and of the scar. The opening of the sinus was too small to permit the passage of a probe. A second attempt to pass a probe the following day was again futile, for while we were able to enter the opening of the sinus at this time, the pain was so great that patient would not tolerate further manipulation.

In the course of about three days the swelling began to be felt by patient on the inside of the mouth. This swelling increased in size until it began to interfere with the patient's respiration. Using a laryngoscope, a red, inflamed mass could be seen at the base of the tongue on the left side. An opening into this area with a long curved bistoury was followed by a free discharge of pus. Washing this pus cavity daily resulted in very decidedly reducing the swelling upon the front of the neck.

The region of the sinus on the front of the neck was then thoroughly cocainized and another attempt was made to pass a very small, flexible probe. About an inch beneath the surface, the probe came to a stop against a hard substance with a definite and unmistakable feeling of dead bone. The hyoid bone, which is the only bone in this location, could not be palpated because of the swelling. Ordinarily it lies just beneath the surface of the skin. Patient was dismissed. A very careful search of the entire medical and surgical literature of the subject revealed seven reported cases of hyoid bone necrosis. At the next visit of the patient an X-Ray picture was taken, which showed a very definite necrosis of the body of the hyoid bone. A second X-Ray was taken with a probe in the sinus and the plate showed the probe passing directly into the necrosed area.

A diagnosis of necrosis of the body of the hyoid was made and patient was advised to undergo a third operation. A specialist was called in consultation and he disagreed with the diagnosis, claiming that we had misinterpreted our X-Ray findings. He made a diagnosis of cyst of the thyroglossal duct. Patient therefore refused to submit to a third operation and again left for the country. I was called by telephone at 4 a. m. about two weeks later, saying that he was "choking to death" and could only breathe with great difficulty.

A second abscess was opened at this time just above the entrance of the trachea. The following day Dr. C. M. Cooper and Dr. M. Herzstein were called in consultation and both men agreed with our diagnosis of hyoid bone necrosis. Patient was then kept under treatment for two weeks, until the swelling had enttirely disappeared, when he left for Rochester to be operated by Dr. Chas. Mayo. At this time patient's symptoms had entirely cleared; Dr. Mayo refused to operate upon our diagnosis. Patient insisted upon being kept under observation, however, and at the end of five days we received word that Dr. Mayo had removed the entire body of a necrosed hyoid bone. Patient returned to the coast in six weeks; after a lapse of five months there is as yet no sign of recurrence. The region of the removed hyoid bone is filled with dense fibrous tissue and there is no interference with the function of the tongue or with swallowing. The patient talks with a heaviness or fullness of the voice, which is accounted for by the fact that the right side of the larynx is paralyzed, the result of cutting the right superior laryngeal nerve during operation.

It is practically impossible to arrive at any satisfactory explanation as to the possible cause of this very rare condition. It is easy to see how the condition could have been associated with and mistaken for the very much more common condition, cyst of the thyroglossal duct.

* Read before the Forty-Second Annual Meeting of the State Society, Del Monte, April, 1912.